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November 23, 2010

VIA EDGAR AND FEDERAL EXPRESS

Jeffrey Riedler Assistant Director U.S. Securities and Exchange Commission 100 F. Street, N.E. Washington, DC 20549-0404

Re: Access Pharmaceuticals, Inc.
Registration Statement on Form S-1
Filed May 3, 2010
File No. 333-166453

Dear Mr. Riedler:

On behalf of our client, Access Pharmaceuticals, Inc., a Delaware corporation (the "Company"), submitted herewith please find Amendment No. 4 ("Amendment No. 4") to the Registration Statement on Form S-1, File No. 333-166453, of the Company (as amended, the "Registration Statement"). The Registration Statement has been revised to respond to the comments of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") that were contained in your letter dated November 18, 2010 (the "Comment Letter").

Set forth below are the responses of the Company to the comments in the Comment Letter. For ease of reference our responses are numbered to correspond to the comment numbers in the Comment Letter and each comment contained in the Comment Letter is printed below in italics and is followed by the response of the Company.

Comment:

- 1. We note the disclosure on the cover page of the prospectus which indicates that each warrant in the unit will allow the holder to purchase an additional 0.3 shares of common stock. However, your next sentence indicates that each warrant entitles the holder to purchase one share of common stock. Please revise your registration statement to address this inconsistency. In particular, please provide the following information:
 - · The number of warrants included in each unit; and
 - The number of shares of common stock that a warrant holder is entitled to purchase.

Amendment No. 4 has been revised to clarify (a) the number of warrants included in each unit and (b) the number of shares of common stock that a warrant holder is entitled to purchase.

2. Please file the placement agent agreement with Hudson Securities, Inc. as an exhibit to your registration statement.

The placement agent agreement with Hudson Securities, Inc. has been filed as an exhibit to the Registration Statement.

We would appreciate the opportunity to discuss any remaining questions or concerns with you at your convenience. If you have any questions or would like to discuss any of the responses in this letter, please feel free to contact me at 617.951.8874 or David Mason at 617.951.8051.

Sincerely,

/s/ John J. Concannon

John J. Concannon

cc: Suzanne Hayes, Esq., *U.S. Securities and Exchange Commission*Stephen B. Thompson, *Access Pharmaceuticals, Inc.*David W. Mason, Esq., *Bingham McCutchen LLP*